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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/523,420	09/22/2005	Lorraine Leite	RN02111G1	1849

7590 09/06/2007
Jean Louis Seugnet
Rhodia Inc CN7500
Intellectual Property Department
259 Prospect Plains Road
Cranbury, NJ 08512-7500

EXAMINER

LE, HOA T

ART UNIT	PAPER NUMBER
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1773

MAIL DATE	DELIVERY MODE
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09/06/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No. 10/523,420	Applicant(s) LEITE ET AL	
Office Action Summary	Examiner H. T. Le	Art Unit 1773	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 31-58 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 31-58 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____ | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____
5) <input type="checkbox"/> Notice of Informal Patent Application
6) <input type="checkbox"/> Other: ____ |
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DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 36, 44, 46 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 36, the term "size" renders the claim indefinite because it is unclear whether "size" denotes the primary particle size of the aggregates or agglomerates or the "size" of the aggregates or agglomerates. Moreover, "particle size" itself is indefinite unless it's specified mean diameter or average diameter, etc.

Claim 44 is indefinite because of the relative term "highly". The term "highly" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably appraised of the scope of the invention.

In claim 46, it is suggested that the second comma on line 2 be changed to "or" for clarity.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 31-58 are rejected under 35 U.S.C. 102(b) as being anticipated by Abolins et al (US 4,233,199).

Claim 31: Abolins teaches a method of making flame retardant material comprising intimately mixing organophosphorous compound with an openly porous structure of fine particles at a temperature that is at least above the melting point of the organophosphorous compound. See Abolins, col. 2, lines 50-55; col. 3, lines 43-50; and col. 5, lines 49-61. Because the mixing is "intimate" and at an elevated temperature, it is necessary that the molten organophosphorous compound impregnated in the pores of the porous structure and thus forms a material having the structure as described in claim 31. More importantly, the so-called 'dry impregnation' of organophosphorous compound in a porous support as disclosed in the invention involves mixing at an elevated temperature (see instant specification, Examples) which is exactly the method taught by Abolins as discussed above. Therefore, it's necessarily inherent that the product formed by intimate mixing as taught by Abolins has the structure described in claim 31.

Claims 32-33 and 37: the porous structure is described as "openly porous" (Abolins, col. 3, lines 43-45); therefore, it is necessarily inherent to have total pore volume at least as claimed.

Claims 34-36 and 38-44: See col. 4, line 12 to col. 5, line 3.

Claims 45-47: See col. 2, lines 50-55 and col. 3, lines 18-42.

Claim 48: See col. 2, lines 65-68.

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Claim 49: Abolins teaches a method of making flame retardant material comprising intimately mixing organophosphorous compound with an openly porous structure of fine particles at a temperature that is at least above the melting point of the organophosphorous compound. See Abolins, col. 2, lines 50-55; col. 3, lines 43-50; and col. 5, lines 49-61. This mixing process is exactly the same as the so-called 'dry impregnation' of organophosphorous compound in a porous support. See instant specification, Examples).

Claim 50: The mixing is above the melting point of organophosphorous flame retardant compound; therefore organophosphorous is inherently viscous.

Claims 51-53: The viscosity of the flame retardant as claimed is considered met by inherence because the flame retardant compound taught by Abolins is the same as the flame retardant compound disclosed in the instant specification. See Abolins, col. 2, lines 50-55 and col. 3, lines 18-42 and compare that teaching to instant claims 45-47.

Claims 54-58: See Abolins, col. 2, lines 34-49.

5. The US 5,397,391 patent cited as X-reference in the International Search Report describes organophosphate ester deposited on inorganic pigments. However, there is no mention whether the phosphate ester is flame retardant organophosphate ester (as not all organophosphate esters possess flame retardant properties) and whether the inorganic pigments are porous.

6. Other references are cited as art of interest.

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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to H. T. Le whose telephone number is 571-272-1511.

The examiner can normally be reached on 10:00 a.m. to 6:30 p.m., Mondays to Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on 571-272-1284. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/H. Thi Le/
H. (Holly) T. Le
Primary Examiner
Art Unit 1773

September 2, 2007